

**PATENT APPLICATION**

Docket No. 9898-321

Client No. SS-18146-US

Applicant: Ki-Yeon Park, Sung-Tae Kim, Young-Sun Kim, In-Sung Park, Jae-Hyun Yeo and Ki-Vin Im

Serial No. not yet assigned

Examiner: not yet assigned

Filing Date: November 12, 2003 ✓

Art Unit: not yet assigned

Title: CAPACITOR OF SEMICONDUCTOR MEMORY DEVICE THAT HAS COMPOSITE  
Al<sub>2</sub>O<sub>3</sub>/HfO<sub>2</sub> DIELECTRIC LAYER AND METHOD OF MANUFACTURING THE SAME**INFORMATION DISCLOSURE CITATION  
FORM PTO-1449 (Modified)****U.S. PATENT DOCUMENTS**

Exam Init	Ref	Document Number	Publication Date	Name	Class	Sub Class
<u>pa</u> ✓	_____	2001-0024387A1	9/21/2001	Raaijmakers, et al.		

**FOREIGN PATENT DOCUMENTS**

Exam Init	Ref	Document Number	Publication Date	Country	Name
_____	_____				

**OTHER DOCUMENTS**

Exam Init	Ref	Author, Title, Date, Pertinent Pages, Etc.)
_____	_____	

Examiner: Date Considered: 3/3/05



PATENT APPLICATION  
Docket No. 9898-321  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Ki-Yeon Park, et al. Conf. No. 8248  
Serial No. 10/713,577 Examiner: Not yet assigned  
Filed: November 12, 2003 ✓ Art Unit: 2818  
For: CAPACITOR OF SEMICONDUCTOR MEMORY DEVICE  
THAT HAS COMPOSITE Al<sub>2</sub>O<sub>3</sub>/HfO<sub>2</sub> DIELECTRIC  
LAYER AND METHOD OF MANUFACTURING THE  
SAME

INFORMATION DISCLOSURE CITATION  
FORM PTO-1449 (Modified)

FOREIGN PATENT DOCUMENTS

<u>Exam Init</u>	<u>Ref</u>	<u>Publication Number</u>	<u>Publication Date</u>	<u>Country</u>	<u>Name</u>
<u>221</u>	_____	P2002-0002596	Jan. 10, 2002	Korea	
<u>22</u>	_____	P2002-0034520	May 9, 2002	Korea	

OTHER DOCUMENTS

<u>Exam Init</u>	<u>Ref</u>	<u>Author, Title, Date, Pertinent Pages, Etc.)</u>
_____	_____	English Language Abstract of Korean Publication No: P2002-0002596
_____	_____	English Language Abstract of Korean Publication No: P2002-0034520

Examiner: *[Signature]*

Date Considered: 3/3/05

In re application of: Ki-Yeon Park, et al. Conf. No. 8248  
Serial No. 10/713,577 Examiner: Nhu, David  
Filed: November 12, 2003 ✓ Art Unit: 2818

For: CAPACITOR OF SEMICONDUCTOR MEMORY DEVICE THAT HAS  
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MANUFACTURING THE SAME

INFORMATION DISCLOSURE CITATION  
FORM PTO-1449 (Modified)

U.S. PATENT DOCUMENTS

Exam Init	Ref	Document Number	Issue Date	Name	Class	Sub Class
<u>W</u>	_____	5,440,157	Aug. 1995	Imai et al.		
<u> </u>	_____	5,641,702	Jun. 1997	Imai et al.		
<u> </u>	_____	6,287,965	Sep. 2001	Kang et al.		
<u> </u>	_____	6,399,491	Jun. 2002	Jeon et al.		
<u> </u>	_____	6,596,583	Jul. 2003	Agarwal et al.		
<u> </u>	_____	6,599,794	Jul. 2003	Kiyotoshi et al.		
<u> </u>	_____	6,660,631	Dec. 2003	Marsh, EugeneP.		
<u>W</u>	_____	6,660,660	Dec. 2003	Kaukka et al.		

INFORMATION DISCLOSURE CITATION  
FORM PTO-1449 (Modified)

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OTHER DOCUMENTS

Exam Init	Ref	Author, Title, Date, Pertinent Pages, Etc.)
_____	_____	

Examiner: *[Signature]*

Date Considered: 7/3/05



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Exam Init	Ref	Document Number	Issue Date	Name	Class	Sub Class
<u>  </u> ✓	<u>  </u>	2002/0115252	Aug. 22, 02	Haukka et al.		

INFORMATION DISCLOSURE CITATION  
FORM PTO-1449 (Modified)

FOREIGN PATENT DOCUMENTS

Exam Init	Ref	Publication Number	Publication Date	Country	Name
<u>  </u> ✓	<u>  </u>	P2001-0082118	Aug. 29, 01	Korea	

OTHER DOCUMENTS

Exam Init	Ref	Author, Title, Date, Pertinent Pages, Etc.)
<u>  </u>	<u>  </u>	English Language Abstract of Korean Publication No: P2001-0082118

Examiner:    ✓

Date Considered:   3/3/05